

**Preliminary Amendment of U.S. National Stage for International Application
PCT/EP00/07496 filed August 3, 2000**

Q3corA --13. (New) The process according to claim 10, wherein the inner surface of the dephlegmation zone is wetted with a mixture of the condensate and the second polymerization inhibitor.--

--14. (New) The process according to claim 10, wherein the second polymerization inhibitor is introduced into the dephlegmation zone at a temperature below the reaction temperature.--

--15. (New) The process according to claim 10, wherein a third polymerization inhibitor is introduced into the reaction zone such that a portion of the inner surface of the reaction zone which is not in contact with the reaction mixture is contacted with the third polymerization inhibitor.--

--16. (New) The process according to claim 12, wherein a third polymerization inhibitor is introduced into the reaction zone such that a portion of the inner surface of the reaction zone which is not in contact with the reaction mixture is contacted with the third polymerization inhibitor.--

--17. (New) The process according to claim 15, wherein the third polymerization inhibitor and the first polymerization inhibitor are the same.--

--18. (New) The process according to claim 15, wherein the second polymerization inhibitor, the third polymerization inhibitor and the first polymerization inhibitor are the same.--

--19. (New) The process according to claim 16, wherein the second polymerization inhibitor, the third polymerization inhibitor and the first polymerization inhibitor are the same.--

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--20. (New) The process according to claim 15, wherein the third polymerization inhibitor introduced into the reaction zone comprises a portion of the liquid reaction mixture which is removed from the reaction zone.--

--21. (New) The process according to claim 16, wherein the third polymerization inhibitor introduced into the reaction zone comprises a portion of the liquid reaction mixture which is removed from the reaction zone.--

--22. (New) The process according to claim 15, wherein the third polymerization inhibitor is introduced into the reaction zone at a temperature below the reaction temperature.--

--23. (New) The process according to claim 10, wherein air is injected into the reaction mixture during the reaction.--

--24. (New) The process according to claim 10, wherein the removal of the portion of the gas/vapor phase from the reaction zone to a dephlegmation zone is carried out under reduced pressure.--

--25. (New) The process according to claim 10, wherein the dephlegmation zone comprises a dephlegmator attached to the top of the reaction zone.--

--26. (New) The process according to claim 10, wherein the dephlegmation zone comprises a vertical tube-bundle heat exchanger.--

--27. (New) The process according to claim 10, wherein the second polymerization inhibitor is introduced into the dephlegmation zone via one or more spray nozzles.--

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Q3 --28. (New) The process according to claim 15, wherein the third polymerization inhibitor is introduced into the reaction zone via one or more spray nozzles.--

--29. (New) The process according to claim 10, wherein the unsaturated carboxylic acid comprises a component selected from the group consisting of acrylic acid, methacrylic acid and mixtures thereof.--

--30. (New) A process for producing esters, said process comprising:

(a) providing a liquid reaction mixture comprising (i) an unsaturated carboxylic acid selected from the group consisting of acrylic acid, methacrylic acid and mixtures thereof, (ii) a polyhydric alcohol, and (iii) a polymerization inhibitor, in a reaction zone having an inner surface;

(b) reacting the acid and the polyhydric alcohol to form an ester, such that a gas/vapor phase is formed comprising water of reaction;

(c) removing at least a portion of the gas/vapor phase from the reaction zone to a dephlegmation zone having an inner surface, under reduced pressure; and

(d) partially condensing the portion of the gas/vapor phase in the dephlegmation zone such that a condensate is formed; and

(e) returning the condensate to the reaction zone;

wherein a portion of the liquid reaction mixture is removed from the reaction zone and introduced into the dephlegmation zone such that the portion of the gas/vapor phase and the condensate are contacted with the portion of the liquid reaction mixture and the inner surface of the dephlegmation zone is wetted with a mixture of the condensate and the portion of the liquid reaction mixture; and wherein a second portion of the liquid reaction mixture is removed from the reaction zone and reintroduced into the reaction zone such that a portion of the inner surface of the reaction zone which is not in contact with the reaction mixture is contacted with the second portion of the liquid reaction mixture.--

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--31. (New) An apparatus for performing the process according to claim 10, said apparatus comprising the reaction zone surmounted by the dephlegmation zone, wherein the reaction zone and the dephlegmation zone are connected for fluid communication; further comprising a first pipe having a first end and a second end, the first end of the first pipe being connected for fluid communication to a lower portion of the reaction zone and the second end of the first pipe being connected to an upper portion of the dephlegmation zone, wherein at least one spray nozzle is located within the vapor pipe, the at least one spray nozzle being connected to the second end of the first pipe for fluid communication between the first pipe and the dephlegmation zone and the at least one spray nozzle being directed towards a lower portion of the dephlegmation zone; and a pump connected to the first pipe.--

--32. (New) The apparatus according to claim 31, wherein the dephlegmation zone comprises a vertical tube-bundle heat exchanger.--

--33. (New) The apparatus according to claim 31, wherein the at least one spray nozzle comprises at least two spray nozzles, at least one being directed towards the inner surface of the dephlegmation zone.--

--34. (New) The apparatus according to claim 31, further comprising cooler connected to the first pipe.--

--35. (New) The apparatus according to claim 31, further comprising a second pipe having a first end and a second end, the first end of the second pipe being connected for fluid communication to a lower portion of the reaction zone and the second end of the second pipe being connected to an upper portion of the reaction zone, wherein at least one spray nozzle is located within the reaction zone, the at least one spray nozzle being connected to the second end of the second pipe for fluid communication between the second pipe and the reaction zone and the at least one spray nozzle being directed towards a portion of the inner surface of the reaction zone which is not in contact with the reaction mixture.--

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Please cancel claims 1-9, without prejudice.